

**Exploring the path through which career adaptability increases job satisfaction and
lowers job stress: The role of affect**

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Abstract

The construct of career adaptability, or the ability to successfully manage one's career development and challenges, predicts several important outcomes; however, little is known about the mechanisms contributing to its positive effects. The present study investigated the impact of career adaptability on job satisfaction and work stress, as mediated by individuals' affective states. Using a representative sample of 1,671 individuals employed in Switzerland we hypothesized that, over time, career adaptability amplifies job satisfaction and attenuates work stress, through higher positive affect and lower negative affect, respectively. The data resulted from the first three waves of a longitudinal project on professional paths conducted in Switzerland. For each wave, participants completed a survey.

Results of the 3-wave cross-lagged longitudinal model show that employees with higher career adaptability at time 1 indeed experienced higher job satisfaction and lower work stress than those with lower career adaptability at time 3. The effect of career adaptability on job satisfaction and work stress was accounted for by negative affect: Individuals higher on career adaptability experienced less negative affect, which led to lower levels of stress and higher levels of job satisfaction, beyond previous levels of job satisfaction and work stress. Overall results support the conception of career adaptability as a self-regulatory resource that may promote a virtuous cycle in which individuals' evaluations of their resources to cope with the environment (i.e., career adaptability) shape their affective states, which in turn influence the evaluations of their job.

Keywords: career adaptability, positive affect, negative affect, job satisfaction, work stress, cross-lagged longitudinal design

Exploring the Path Through Which Career Adaptability Increases Job Satisfaction and
Lowers Work Stress: The Role of Affect

Globalization is having a strong impact on the way individuals approach employment in the postmodern society ([Savickas et al., 2009](#)). Careers are becoming increasingly boundaryless ([Arthur & Rousseau, 1996](#)), a condition that requires individuals to use new resources to face the turbulence of the job market and the instability of employment. The sociologist Zygmunt Bauman (2000) used the metaphor of liquidity to describe the condition of constant change that prevents individuals from consolidating habits and procedures. Postmodern society, whose profile is difficult to define, creates insecurity, identity crisis, and chronic uncertainty. These feelings also are experienced in the workplace, prompted by words such as “downsizing,” “optimization,” “fluctuating demand,” “competition,” or “efficiency.” In this climate, the capacity to keep oneself motivated to work despite adverse conditions, and to manage the sense of uncertainty become fundamental requirements for surviving in liquid modernity. Indeed, at the end of the 20th century the World Health Organization (1993) introduced the notion of “life skills” to emphasize the psychosocial skills needed to cope with the pressures of everyday life. These skills include analyzing and using information, managing the self, and interacting effectively with others.

In this study we investigated the role of one such skill, namely career adaptability, or the ability to successfully manage one’s career development and challenges. Although career adaptability has shown to be a predictor of several important outcomes for individuals’ career (e.g., Koen, Klehe, Van Vianen, Zikic, & [Nauta, 2010](#); Zacher, 2014; Zikic & Klehe, 2006), and job attitudes (Authors, XXX; Klehe, Zikic, Van Vianen, De Pater, 2011; Ito & Brotheridge, 2005), little is known about the mechanisms that may explain how adaptability exerts its positive effects in the workplace. We used a 3-wave cross-lagged longitudinal approach to

explore affect as a mechanism through which career adaptability induces changes in job satisfaction and work stress.

Career Adaptability

Vocational behavior theories have encountered deep modifications with the advent of the global economy. The assumption that career goes through a fixed sequence of stages, that individual characteristics are basically unchangeable across life, and that jobs are held lifelong in stable organizations yielded to a new conception of career construction in which vocational behavior emerges from the process of making meaning of “past memories, present experiences, and future aspirations by weaving them into a life theme that patterns the individual’s work life” (Savickas, 2005, p. 43). This reconceptualization of vocational behavior emphasizes the importance of adapting to a rapidly changing environment as a fundamental resource to face the global market and to be able to design one’s own life and career (Authors, XXX). It is within this frame of reference that terms such as adaptability, lifelong learning, career self-management, and self-directedness emerged. In particular, career adaptability resources represent the combination of competences and attitudes that allow individuals to fit the environment through adaptive behaviors and make appropriate educational and career choices.

Career adaptability was defined by Savickas (1997) as “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” (p. 254). In the last several years career adaptability has become a core construct in vocational counseling as a crucial aspect that supports reemployment and the choice of a profession in young people (Hirschi, 2009; Savickas et al., 2009). Adolescents higher in career adaptability show higher levels of well-being (Authors, submitted), and are better at managing vocational transitions (e.g., Germeijs & Verschueren, 2007). Furthermore, higher career adaptability predicts

reemployment quality ([Zikic & Klehe, 2006](#)), sense of power, life satisfaction, and general health ([Duffy, 2010](#); Authors, in press; Authors, XXX).

Career adaptability is composed of four different career adapt-abilities (Savickas & Porfeli, 2012): concern, curiosity, confidence, and control. Concern refers to the commitment to making choices for the future and planning how to achieve career-related goals. Lack of career concern may lead to indifference or pessimism in envisioning future developments. Curiosity denotes an exploratory attitude toward career options and also indicates interest in the world of work. Lack of career curiosity may lead to lack of expectations regarding future employment. Confidence concerns self-efficacy beliefs regarding problem-solving and positive attitudes for overcoming obstacles. Lack of career confidence is viewed as avoidance of potentially threatening career opportunities and may lead to hampering career decisions and actions. Control refers to feeling responsible for decisions concerning career and proactive behaviors in choosing a career. Lack of career control may cause people to feel indecisive and uncertain about their future. The four subscales load on one underlying latent factor, supporting the conception of career adaptability as a unitary construct (Authors, XXX). Higher scores on career adaptability are associated with higher work engagement (Authors, XXX), lower work stress (Authors, XXX) and better career transitions (Brown, Bimrose, Barnes, & Hughes, 2012).

Because of the influence that career adapt-abilities have on successful adaptation and, more generally on well-being, research has started to investigate the characteristics of adaptable individuals. The theoretical model recognizes adaptive personality traits, such as proactivity; adaptability resources, such as the four Cs; adapting behaviors, such as exploring, choosing, and planning; and adaptation outcomes, such as decidedness, satisfaction, and well-being. Highly adaptive individuals are better predisposed, in terms of preparation and mental

readiness, to search for a job (Koen et al., 2010). They also tend to be more extraverted and conscientious (Gunkel, Schlaegel, Langella, & Peluchette, 2010). The personality characteristics of low neuroticism and high extraversion and social context beliefs were found to be significant predictors of career adaptability development in a population of 330 Swiss eighth graders (age range 12-16; Hirschi, 2009). Ito and Brotheridge (2005) found that contextual factors also may foster employees' career adaptability. In particular, they found that participating in decision-making behaviors and processes, the supervisor's career support, and autonomy in the assigned tasks fostered adaptation and work commitment. Moreover, career adaptability appears to mediate the relationship between adaptive personality and adapting behaviors in terms of work engagement (Authors, XXX). Interestingly, results also showed a positive association between career adaptability and intention to leave the company, suggesting that being highly adaptable may also open up new opportunities for career development in people already employed.

The Route from Career Adaptability to Positive Job Attitudes

Although the positive effect of career adaptability has been demonstrated in several contexts, less is known about the mechanisms that may help individuals with strong adaptability resources to actually engage in adapting their behaviors to their work environment, which in turn lead to better adaptation outcomes. Here, we focus on two of the most studied indicators of individuals work adaptation, namely the outcomes of job satisfaction and work stress.

One important predictor of job satisfaction and work stress involves employees' affective reactions (e.g., Brief & Weiss, 2002; Connolly & Viswesvaran, 2000; Judge & Ilies, 2004). Thoresen, Kaplan, Barsky, Warren, and de Chermont (2003) estimated a meta-analytical mean correlation of .34 and -.34 respectively for positive and negative affectivity and overall

job satisfaction. Similarly, negative affectivity is associated with work-related stress (e.g., Schaubroeck, Ganster, & Fox, 1992). In a meta-analysis, Ng and Sorensen (2009) found a correlation of $-.45$ and $.52$ for positive and negative affectivity and job stress, respectively.

In sum, much research on this topic investigated the role of affective dispositions, or traits, as determinants of job outcomes. The basic assumption is that individuals who are more prone to experience positive emotions overall may better appreciate their work environments and feel more satisfied with their jobs. Similarly, individuals who are more prone to experience negative emotions overall, may approach their workplace with stronger anxiety and higher sensitivity to negative stimuli, which would lead them to be less satisfied with their jobs and more distressed in the workplace.

Process models of work attitudes and behaviors provide possible directions regarding how disposition-like characteristics might influence organizational outcomes. For example, Motowidlo (1996) postulated that individuals' dispositions may affect the encoding, understanding, and recall of organizational information, which may then impact satisfaction via the cognitive and emotional processes generated by dispositions. In their comprehensive model, Staw and Cohen-Charash (2005) described how the organizational environment influenced how the individual interprets the environment; dispositional reactions may then amplify or limit the expression of job satisfaction. Weiss and Cropanzano (1996) explained how organizational contexts and individual predispositions to experience emotions generate affective reactions, which then influence work attitudes and behavior in organizations. A particularly interesting feature of this model is that it distinguishes affectivity as a dispositional or trait-like characteristic from the state-like affective reactions that one may experience in specific circumstances.

Indeed, less literature has analyzed the role of affect as a state rather than as a trait.

In the affective events theory (AET) Weiss and Cropanzano (1996) emphasized the role of situational work-related events that have emotional valence and that may determine job attitudes and workplace behavior. In the current study we also investigated affective reactions as state-like events measured across the span of one month. In addition, we hypothesized that the way of interpreting emotional events in the workplace may be influenced by resources individuals possess (career adapt-abilities), which may foster better adaptation to the workplace. In fact, in appraisal theories of emotions (e.g., Lazarus, 1991; Scherer, 2001) authors emphasized how the interpretation and evaluation of a situation elicits different affective responses. Career adapt-abilities concern the resources individuals may use to frame the environment in a way that looks less threatening and more accessible, thus promoting more proactive behavior and ultimately better adjustment. Hence, our aim was to explain the effects of career adaptability on job attitudes through its influence on people's affective experiences. No study, to our knowledge, has considered such a possibility.

Individuals with strong adaptability resources may consider the characteristics of their jobs in a more positive light—for example, by evaluating one's career challenges as opportunities, rather than threats, leading to the develop additional skills—which may increase positive emotions and lead to higher job satisfaction. Similarly, highly adaptable individuals may perceive more control over workplace uncertainty and feel confident to overcome obstacles, reducing the impact of the negative emotions generated by instability and experiencing overall lower work stress.

In sum, in this research we explore whether career adaptability might have an impact on positive and negative affect experienced one year later, which in turn would influence stress at work and job satisfaction in the timeframe of another year, above and beyond the previous

levels. As such, we advance one possible pathway between career adaptability and work related outcomes: the resources of career adaptabilities, which consist of the personal resources to cope with the life challenges, predispose people to feel constructive affective states, which in turn change how they evaluate their jobs. More specifically, we hypothesized that career adaptability at Time 1 would relate positively to positive affect at Time 2 (H1a), and relate negatively to negative affect at Time 2 (H1b). In addition, we hypothesized that positive affect at Time 2 would increase job satisfaction at Time 3 (H2a) and that negative affect at Time 2 would also increase work stress at Time 3 (H2b), beyond previous levels of these attitudes. The last set of hypotheses referred to a mediation effect: we hypothesized that over time, career adaptability would increase T3 job satisfaction beyond its previous level through higher positive affect experienced at Time 2 (H3a). Similarly, career adaptability would decrease T3 work stress beyond its previous level through the lower negative affect experienced at T2 (H3b). Figure 1 visually represents the hypotheses tested.

Method

Procedure

The data in this study resulted from the first three waves of a longitudinal project on professional paths conducted at the Swiss National Centre of Competence in Research—Overcoming Vulnerabilities: Life Course Perspectives (LIVES). The data for each wave were collected yearly between January and April or May, starting in 2012 (T1) and continuing in 2013 (T2) and 2014 (T3). For each wave, participants received a letter presenting the project and inviting them to complete a survey while guaranteeing confidentiality. The research protocol required 45 to 55 minutes and participants could choose to report on the scales relevant to this study in an online or paper-pencil format, in German or in French. In each wave, between 86% and 87.4% of the participants completed

the online version and between 63.1% and 63.4% of the questionnaires were completed in German. Data were matched through a 6-digit code uniquely identifying each participant. For the paper-pencil format, the code was printed on the questionnaire; for the online questionnaire, participants entered the 6-digit code plus a 4-digit password provided in the invitation letter. Participants received 20 Swiss Francs as compensation for each set of answers; at the end of the survey, they could choose between a gift certificate valid either in a nationwide grocery store or a bookstore or a donation to a non-profit organization.

Participants

Participants came from a randomly-selected list of the national register of inhabitants provided by the Swiss Federal Statistics Office (SFSO). This list was representative of the Swiss working-age population (i.e., between 25 and 55 years old at T1) in terms of age, gender, and nationality. It was completed with a list of people who were unemployed in 2012 provided by the State Secretary for Economic Affairs (SECO). For this study, we kept the 1,671 participants (51.3% female; $M_{age} = 42.3$ years, $SD = 8.53$ at T1) with non-missing data for career-adaptability at T1 and who reported a working percentage at T2 ($M = 84.02$, $SD = 22.73$) or T3 ($M = 84.03$, $SD = 22.50$).

Measures

Career adaptability. German and French versions of the *Career Adapt-Abilities Scale* Form 2.0 (Authors, XXX; Authors, XXX; [Savickas and Porfeli, 2012](#)) were used to assess career adaptability at T1. This scale includes 24 items equally divided into 4 subscales measuring resources of concern (e.g., “Thinking about what my future will be like”), control (e.g., “Taking responsibility for my actions”), curiosity (e.g., “Looking for opportunities to grow as a person”), and confidence (e.g., “Overcoming obstacles”). Participants rated how

strongly they have developed their resources to manage their professional trajectory on a 5-point Likert-type scale ($1 = I\ don't\ have\ the\ ability\ to,$ $5 = I\ have\ a\ very\ strong\ ability\ to$).

Positive and negative affect. Positive and negative affect were measured at T2 and T3 with a 12-item scale developed by Mroczek and Kolarz (1998). Participants indicated the frequency with which they felt six positive (e.g., “extremely happy”) and six negative affective states (e.g., “so sad nothing could cheer you up”) during the last month on a 5-point Likert-type scale ($1 = never,$ $5 = always$). This scale was chosen because of its conciseness and its good reliability, with alphas ranging from .87 for negative and .91 for positive affect as reported by Mroczek & Kolarz (1998).

Job satisfaction. Participants reported their job satisfaction through six items on a 4-point Likert-type scale ($1 = not\ at\ all\ satisfied,$ $4 = completely\ satisfied$). Five items were translated and adapted in French from the brief version of the *Minnesota Satisfaction Questionnaire* (Weiss, Dawis, England, & Lofquist, 1967), which assesses different facets of job satisfaction (i.e., supervisor, job security, salary, conditions, and colleagues). The sixth item was added to assess global job satisfaction (i.e., “Overall, to what extent are you satisfied with your job?”). This scale has been used in previous studies and has shown good psychometric properties (e.g., Maggiori, Johnston, Krings, Massoudi, & Rossier, 2013). To further test its psychometric characteristics, we conducted a principal component analysis, which yielded 1 factor solution that accounted for 98.21% of the variance. The reliability of the scale at the different time of measurement was also satisfactory (see Table 1).

Work stress. Participants' experience of stress at work was measured with the *General Work Stress Scale* (De Bruin & Taylor, 2005). This questionnaire focuses on the psychological aspects generated by stress, rather than the physiological ones. Participants answered nine questions, such as “Does work make you so stressed that you find it hard to concentrate on

your tasks?” on a 5-point Likert-type scale (*1 = never, 5 = always*). We chose this scale because it appeared as an appropriate measure of the construct: An investigation of the factor structure of the questionnaire showed that it measures one global factor, labelled General Work Stress, and that the reliability of the scale as measured with the Cronbach’s alpha coefficient was good, between .88 and .89 (De Bruin, 2006).

Data Analysis

We used Stata 13 to compute scores for the variables of interest and the descriptive statistics, including all the scales’ alphas (see Table 1). We tested our hypotheses using a two-stage path analysis in Mplus version 7.2. We did so using a full-information maximum likelihood robust estimator to ensure standard errors of estimates were unaffected by possible skewed distributions of the dependent variables.

Before testing our hypotheses, we compared a series of nested models. More specifically, the first stage of these models all predicted effects of career adaptability measured at T1 on positive and negative affect, at T2 (H1), and on job satisfaction and work stress at T2. Because one might legitimately expect reciprocal causation, namely that job attitudes influence the affect people experience, too—being satisfied with one’s job could make one feel happy—the second stage of these models was tested with different set of cross-lagged relationships, while still keeping the focus on the effects of affective states at T2 on job attitudes at T3 (H2). In a first model (M1), we only estimated stability effects of each T2 variable on its T3 counterpart (e.g., T2 work stress on T3 work stress) and correlations between error terms of the variables at T2 and T3 (e.g., T2 negative affect and T2 work stress). We then added cross-lagged effects of job attitudes on affective states in a second model (M2). In a third model (M3), we included the cross-lagged relationships of interest (i.e., T2 positive affect on T3 job satisfaction, and T2 negative affect on T3 work stress). Finally, in a fourth model (M4), direct

effects of career adaptability on job attitudes were constrained to zero to test whether job attitudes and affect at T2 completely explained the direct effect of career adaptability on job attitudes at T3. Importantly, controlling for age and gender did not affect any of our conclusions. Accordingly, we did not include these in the models.

Models were compared according to the Satorra-Bentler scaled χ^2 (SB- χ^2) difference test because χ^2 calculations are biased with robust estimation (Satorra & Bentler, 2001). This statistic was complemented with fit indices. In particular, we followed recommended cutoff values of $> .95$, $< .06$, and $< .08$ for comparative fit index (CFI), root mean squared error of approximation (RMSEA), and standardized root mean squared residual (SRMR), respectively (Hu & Bentler, 1999). We tested indirect effects with 95% bias-corrected confidence intervals of estimates generated with a bootstrap procedure repeated 5,000 times (MacKinnon, Lockwood, & Williams, 2004; Shrout & Bolger, 2002).

Results

For wave 2 and 3, we first explored differences between participants who responded to the questionnaire and those who did not (or only did partially) on measures in other waves. In each wave, participants who completed the questionnaires were older, experienced higher positive affect and lower negative affect than those who did not (Table 2). Importantly, all effect sizes were trivial to small, suggesting non-response was not a major concern.

As expected, career adaptability correlated positively with positive affect and job satisfaction, and negatively with negative affect and work stress at both Time 2 and Time 3 (see Table 1). T2 positive and negative affect also presented significant correlations with job satisfaction and work stress. These correlations were similar in magnitude at T2 and T3; they appeared stronger for work stress than for job satisfaction. Positive and negative affect strongly and negatively correlated at T2 and T3.

Comparison of models

Table 3 summarizes Chi Squares, associated p -values, fit indices and comparison of the different models tested. Model 3 had a very good fit with the data, $\chi^2(4, N = 1'671) = 13.707, p = .008, CFI = 1.00, RMSEA = .038$ (90% CI: .017, .061), SRMR = .019. In particular, this model better fit the data than Model 1, which accounted only for the stability of affect and job attitudes between T2 and T3 and for cross-sectional correlations between error terms of T2 and T3 variables, respectively. Moreover, in comparison to Model 2, which included cross-lagged relationships between job attitudes at T2 and affect at T3, Model 3, which included cross-lagged relationships between affect and job attitudes, better described the data. This suggested that the cross-lag effects of affective states on job attitudes were necessary to account for the data structure. Yet, Model 3 did not provide a better fit than Model 4, which constrained the direct effects of career adaptability at T1 on job attitudes at T3 to zero, $\chi^2(6, N = 1,671) = 18.021, p = .006, CFI = 1.00, RMSEA = .035$ (90% CI: .017, .054), SRMR = .021, $\Delta\chi^2(2) = 3.98, p = .137$. That is, Model 4 was preferred over Model 3 because it was more parsimonious and had a similar fit. Accordingly, we tested our hypotheses on the basis of Model 4, which is depicted in Figure 2.

Testing Hypotheses 1 and 2

Model 4 supported Hypotheses 1a and 1b (see Figure 2) predicting that career adaptability would be positively related to positive affect (H1a), and negatively related to negative affect (H1b). That is, participants with higher career adaptability at T1 reported less negative affect and more positive affect one year later than participants with lower career adaptability. Model 4 only partially supported Hypothesis 2 stating that T2 positive and negative affect would respectively increase T3 job satisfaction and T3 work stress beyond their previous levels. Furthermore, after controlling for the stability of job satisfaction, the lagged effect of positive affect on job satisfaction was only marginal, therefore not supporting H2a. By

contrast, after controlling for the stability of work stress, the lagged effect of negative affect on work stress was significant, supporting H2b. Additionally, negative affect had a significant negative lagged effect on job satisfaction, although positive affect did not significantly influence work stress. Overall, these results suggested that negative affect, more than positive affect, plays a role in residual changes in job attitudes, such as job satisfaction and work stress, from one year to the other.

Testing for Mediation

Hypothesis 3 predicted that career adaptability would increase job satisfaction and decrease work stress through more positive (H3a) and less negative affect (H3b), respectively. The bootstrap estimates and the 95% bias-corrected confidence intervals revealed that the indirect effect of career adaptability on job satisfaction at T3 through positive affect experienced at T2 included zero, $\beta = .02$, $SE = .009$, 95% CI [-0.003, 0.03]; H3a was therefore not supported. Furthermore, career adaptability showed a negative indirect effect on work stress at T3 through its negative effect on negative affect at T2, $\beta = -.03$, $SE = .008$, 95% CI [-0.05, -0.02], supporting H3b. Although not hypothesized, negative affect additionally partially explained the positive effect of career adaptability on job satisfaction at T3, $\beta = .02$, $SE = .007$, 95% CI [0.003, 0.03]. In comparison, positive affect did not significantly mediate the effect of career adaptability on work stress, $\beta = -.003$, $SE = .008$, 95% CI [-0.02, 0.01].

Importantly, the model comparison indicated that these partial mediation effects complemented the partial mediation of career adaptability on job attitudes at T3, via the stability coefficients of job attitudes (e.g., work stress and job satisfaction) at T2 and that, together, they fully explained the effects of career adaptability at T1 on job attitudes at T3. The comparison between Model 2 and Model 3 showed that the direct paths from career

adaptability to T3 job satisfaction and T3 work stress dropped from .07 to .04 (in absolute value) and was not significant when cross-lagged effect of affect on job attitudes were included. Model 4 also revealed a similar fit to Model 3 while constraining the direct effect of career adaptability on job attitudes at T3 to zero. In sum, these results suggest that, considering previous level of job satisfaction and work stress, the higher career adaptability the lower the increase in work stress and the lower the decrease in job satisfaction due to career adaptability's effect on negative affect.

Discussion

The present study explored the mechanisms that may explain the positive effect of career adaptability on job attitudes, in particular job satisfaction and work stress. Results supported the hypotheses regarding career adaptability as a set of abilities that helps employees to adjust to their work environment by influencing their affective responses. Our results provide a unique contribution to the overall understanding of the construct of career adaptability; indeed, that career adaptability may exert positive effects in the workplace is not new to the literature (e.g., Authors, XXX). Instead, we have shown a path through which such positive effects may occur. In particular, our results show that the mobilization of resources and the positive attitudes towards challenges characterizing career adaptability are associated with more positive and less negative affect one year later. Furthermore, career adaptability reduces work stress and increases job satisfaction by lowering the impact of negative affect. Notably, these effects were observed three times over a two-year period (2012-2014), with measurements at baseline and one-year time intervals. Overall results support the conception of career adaptability as a self-regulatory skill that may model affective reactions in a way that protect from deterioration of job attitudes through its effects on negative affect.

It should be noted that the hypothesized mediational path of positive and negative affect leading to respectively higher job satisfaction and lower work stress was supported only through negative affect: Individuals higher in career adaptability experienced less negative affect a year later, which led them to better cope with stress at the one-year interval. In the case of job satisfaction, we did not find support for the hypothesis that the positive affect experienced by high adaptability-scoring individuals would lead to higher job satisfaction. Instead, we found that the effect of career adaptability on job satisfaction was explained by negative affect, for which lower negative affect was related to higher job satisfaction. Therefore, it appears that employees with higher career adaptability are more satisfied with their jobs and that this relation is accounted for by reduced negative feelings lessening their job dissatisfaction. All in all, results suggest that career adaptability makes adaptation to the work environment easier and more effective: Generalized negative affect reduction linked to higher career adaptability helps to buffer work stress and to protect against known decreases in job satisfaction ([Boswell et al., 2005](#)). Thus, from our study, career adaptability emerges as a factor that protects against adversities more than a factor that promotes positive experiences.

Notably, this state of affairs does not result from a missing relationship between career adaptability and positive affect. Participants with higher career adaptability scores indeed experienced more positive affect than those with lower scores. Instead, our results suggest that the positive affect did not mediate the positive relation between career adaptability and job satisfaction because positive affect did not increase job satisfaction the next year, beyond previous levels of job satisfaction. This weaker effect of positive affect on job attitudes was previously documented (e.g., [O'Shea et al., 2002](#)), and might be explained by the relatively strong impact of negative events in comparison to positive ones in people's life ([Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001](#); [Weiss & Beal, 2005](#)). Whereas negative events or

working conditions might have longer lasting effects on employees' job attitudes, the effect of positive events or desirable conditions might be more transient (Lyubomirsky, 2011). Hence, by extension, effects of positive affect might be more difficult to observe over long time intervals, such as those used in our study. In the future, research might consider adopting different time frames to examine the extent to which positive affect truly affects job attitudes.

Another explanation concerning the lack of mediation of positive affect concerns the scales employed for measuring affect, which were highly correlated with one another—more than we expected, based on the literature (e.g., r between $-.16$ and $-.27$; Schmukle, Egloff, & Burns, 2002). Thus, it might be that the mediating path for positive affect did not emerge because of the stronger effect of negative affect (cf. Preacher & Hayes, 2008, for the reduced effect of mediators when they are correlated). Further research should test for the relationship between career adaptability and positive emotions by using the traditional *PANAS* scale, in which the two scales are almost independent one from the other.

Our results provide important theoretical and empirical contributions. First, we uncovered a possible mechanism through which career adaptability may exert desirable effects in the workplace, a subject that has received little attention in the literature. Moreover, our results supported the idea of a reciprocal effect of cognitive evaluations on affect: Individuals' evaluations of their resources to cope with the environment (i.e., career adaptability) shape their affective states, which in turn influence the evaluation of their job, in particular job satisfaction and work stress. Our results suggest that career adaptability may trigger a virtuous circle between cognitive evaluations and affective responses: Employees with higher career adaptability experience less negative affect than others. In turn, the less the employees experience negative affect states, the lower their work stress; in addition, and as highlighted by the cross-lagged effect of work stress on affect, the less the employees experience work stress,

the lower their negative affect and the higher their positive affect. We further suggest that individuals more satisfied with their job environment may feel more empowered and therefore more able to cope with their work environments' challenges.

Second, we tested the affective influences of career adaptability on job attitudes by investigating individuals' changes in cognitions and affects across a two-year time frame. The cross-lagged longitudinal design allowed us to test temporal paths, accounting for stable variable effects, such as job satisfaction and work stress at Time 2. Therefore, we were able to show the effect of career adaptability on work stress and job satisfaction by isolating the additional contributions of negative affect beyond previous level of these job attitudes. Our results reveal how career adaptability could trigger a virtuous cycle in time in which the adaptive properties of career adaptability may have long lasting effects on job attitudes through their impact on affective responses (Authors, XXX).

Conclusion

The climate of incertitude and changeable work conditions characterizing the current employment situation regularly tests employee's capacity to face career challenges. To be employable individuals need to be able to adapt to their contexts as rapidly changing it they may be. The capacity to be flexible and adaptable is well captured by the construct of career adaptability, which describes individuals' attitudes towards career related challenges, and which functions as a self-regulatory resource. Using a cross-lagged longitudinal design, we have shown that the effect of career adaptability on job attitudes unfolds in a temporal sequence that clearly highlights one way in which workplace adaptation may occur. This research contributes to the understanding of career adaptability by uncovering the affective pathway through which it may exert desirable outcomes in the workplace. Interpreting a situation in a constructive way shapes the individual's feeling about the situation, which then influences

whether the individual considers workplace challenges as opportunities or threats. Our results speak to the importance of valuing individuals' appraisals of their resources to cope with environmental challenges as a key element for preventing vulnerability.

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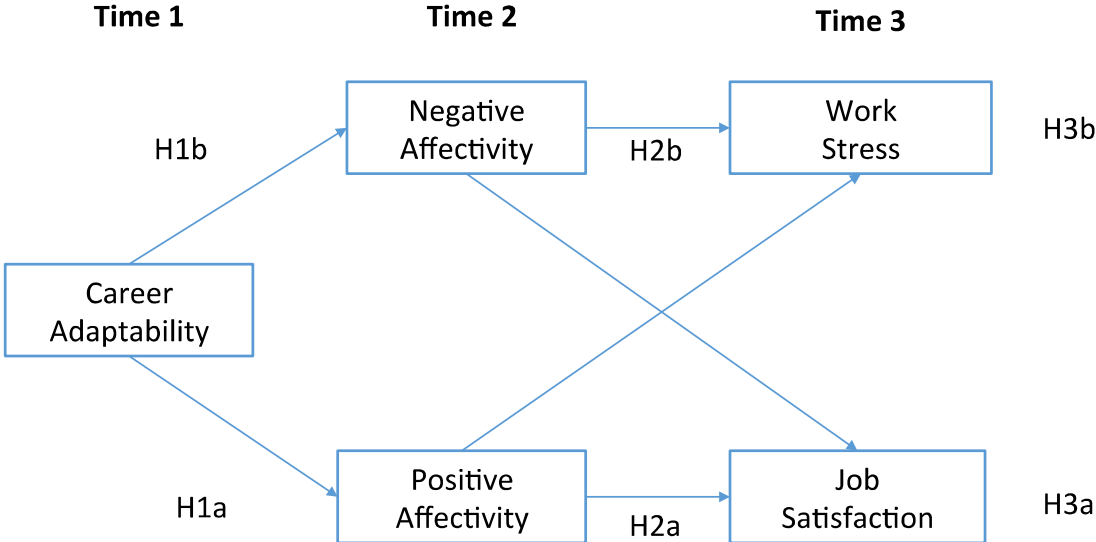


Figure 1. Hypotheses tested in the present study.

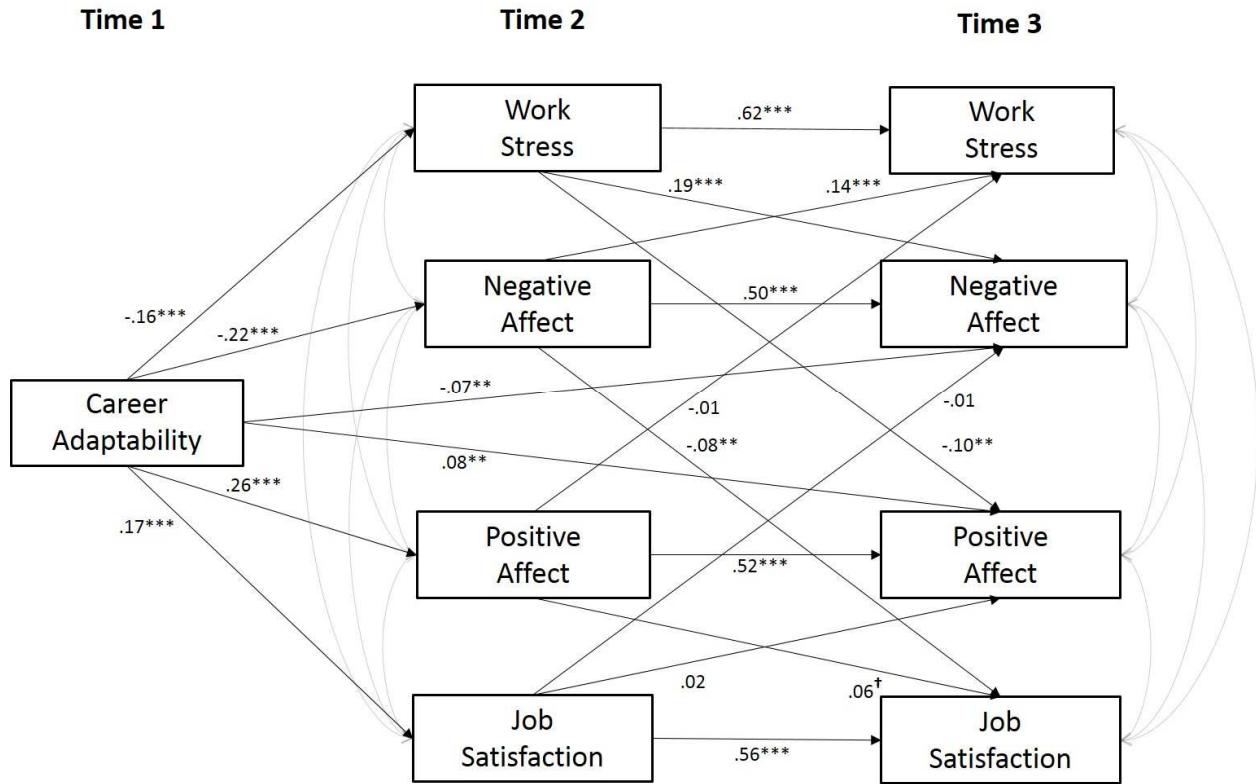


Figure 2. Standardized coefficients of Model 4. Lightly-colored, double-headed arrows depict correlations between residuals; their coefficients are omitted for the sake of clarity. † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 1

Means, Standard Deviations, Correlations and Reliabilities of Study Variables

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
Time 1												
1. Career adaptability	1,671	3.78	0.51	(.94)								
Time 2												
2. Positive affect	1,485	3.59	0.60	.25	(.87)							
3. Negative affect	1,487	2.02	0.64	-.22	-.66	(.83)						
4. Job satisfaction	1,451	3.18	0.47	.16	.33	-.29	(.77)					
5. Work stress	1,370	1.90	0.63	-.15	-.43	.54	-.47	(.89)				
Time 3												
6. Positive affect	1,262	3.61	0.61	.25	.62	-.49	.26	-.35	(.88)			
7. Negative affect	1,262	1.97	0.65	-.23	-.49	.65	-.26	.46	-.66	(.86)		
8. Job satisfaction	1,274	3.17	0.46	.19	.29	-.27	.59	-.34	.36	-.33	(.76)	
9. Work stress	1,208	1.88	0.64	-.17	-.38	.47	-.34	.68	-.49	.62	-.45	(.90)

Note. All correlations are significant at $p < .001$. Cronbach's alphas appear on the diagonal in parentheses.

Table 2

Summary of Comparisons Between Participants who Responded and Those Who Did Not at Time 2 and Time 3

Variable	Responded vs. Did Not Respond at Time 2			Responded vs. Did Not Respond at Time 3		
	<i>M</i>	Test	Effect size	<i>M</i>	Test	Effect size
Time 1						
Gender (%)	51.6 vs. 49.8	$\chi^2(1) = 0.31, ns$		51.7 vs. 50.1	$\chi^2(1) = 0.35, ns$	
Age	42.49 vs. 41.38	$t(1669) = -2.04, p = .041$	$d = 0.13$	42.64 vs. 41.40	$t(1669) = -2.68, p = .007$	$d = .15$
Career adaptability	3.77 vs. 3.82	$t(1669) = 1.33, ns$		3.77 vs. 3.81	$t(1669) = -1.17, ns$	
Time 3 (for comparison at Time 2) and Time 2 (for comparison at Time 3)						
Positive affect	3.64 vs. 3.48	$t(1260) = -3.49, p < .001$	$d = 0.24$	3.62 vs. 3.52	$t(1483) = -2.76, p = .006$	$d = .16$
Negative affect	1.94 vs. 2.11	$t(1260) = 3.62, p < .001$	$d = 0.26$	1.97 vs. 2.14	$t(1485) = 4.36, p < .001$	$d = .25$
Job satisfaction	3.17 vs. 3.18	$t(1272) = .11, ns$		3.18 vs. 3.17	$t(1449) = -0.32, ns$	
Work stress	1.88 vs. 1.86	$t(1206) = -.50, ns$		1.88 vs. 1.94	$t(1368) = 1.48, ns$	

Table 3

 χ^2 and Fit Indices of the Tested Models and χ^2 Difference Tests

	χ^2 (df)	<i>p</i>	SB correction	CFI	RMSEA 95% CI	SRMR	Comparisons	$\Delta\chi^2$ (df) ^a	<i>p</i>
M1 Autoregressive coefficients and correlation between error terms	90.41 (12)	< .001	1.336	.98	.063 [.051; .075]	.071	M1 vs. M3	78.31(8)	< .001
M2 Cross-lags job attitudes → affect	44.33 (8)	< .001	1.300	.99	.052 [.038; .068]	.043	M2 vs. M3	32.54(4)	< .001
M3 Cross-lags affect → job attitudes	13.71 (4)	.008	1.421	1.00	.038 [.017; 0.61]	.019			
M4 Without direct effect of career adaptability on job attitudes at T3	18.20 (6)	.006	1.304	1.00	.035 [.017; 0.54]	.21	M3 vs. M4	3.98(2)	.137

Note. df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

^a Because models are computed with a robust estimator, model comparison are based on Satorra-Bentler corrected χ^2 scaled difference tests.